

IN THE CLAIMS

1-17 (canceled)

18. (new) An isolated and purified protein comprising the amino acid sequence shown in SEQ ID NO:2.

19. (new) An isolated and purified protein comprising an amino acid sequence which is at least 95% identical to the amino acid sequence of claim 18 and which has a receptor tyrosine kinase MerTK activity.

20. (new) A purified preparation of antibodies which specifically bind to the protein of claim 18.

21. (new) The preparation of claim 20 wherein the antibodies are polyclonal.

22. (new) The preparation of claim 20 wherein the antibodies are monoclonal.

23. (new) The preparation of claim 20 wherein the antibodies are single-chain antibodies.

24. (new) The preparation of claim 20 wherein the antibodies are Fab, F(ab')₂, or Fv fragments.

25. (new) An isolated and purified polynucleotide which encodes the protein of claim 18.

26. (new) The polynucleotide of claim 25 which comprises the nucleotide sequence shown in SEQ ID NO:1 or SEQ ID NO:3.

27. (new) The polynucleotide of claim 25 which is a cDNA.

28. (new) An isolated and purified single-stranded polynucleotide comprising at least 8 contiguous nucleotides of a coding sequence or a complement of the coding sequence for the protein of claim 18.

29. (new) The polynucleotide of claim 28 wherein the coding sequence comprises the nucleotide sequence shown in SEQ ID NO:1 or 3.

30. (new) An expression construct, comprising;

 a coding sequence for the protein of claim 18; and

 a promoter which is located upstream from the coding sequence and which controls expression of the coding sequence.

31. (new) The expression construct of claim 30 wherein the coding sequence comprises the nucleotide sequence of SEQ ID NO:1 or 3.

32. (new) A host cell comprising the expression construct of claim 30.

33. (new) The host cell of claim 32 which is prokaryotic.

34. (new) The host cell of claim 32 which is eukaryotic.

35. (new) A method of producing a protein, comprising the steps of:

 culturing the host cell of claim 32 under conditions whereby the protein is expressed; and

 recovering the protein.

36. (new) A method of detecting an expression product of a gene encoding the protein of claim 18, comprising the steps of:

 contacting a test sample with a reagent that specifically binds to an expression product of the nucleotide sequence shown in SEQ ID NO:1 or 3;

 assaying the test sample to detect binding between the reagent and the expression product; and

 identifying the test sample as containing the expression product if binding between the reagent and the expression product is detected.

37. (new) The method of claim 36 wherein the expression product is a protein.

38. (new) The method of claim 36 wherein the reagent is an antibody.

39. (new) The method of claim 36 wherein the cell is cultured *in vitro* and wherein the test sample is culture medium.

40. (new) The method of claim 36 wherein the expression product is an mRNA molecule.

41. (new) The method of claim 40 wherein the reagent is an antisense oligonucleotide.

42. (new) A method of treating comprising the step of:

administering to a patient having a disorder selected from the group consisting of a gastrointestinal disorder, a liver disorder, a metabolic disorder, a neurological disorder, a cardiovascular disorder, a hematological disorder, a reproductive disorder, and endocrine disorder, a hormonal disorder, a respiratory disorder, and a genitourinary disorder an effective amount of an agent selected from the group consisting of an antisense oligonucleotide that regulates expression of a gene encoding the protein of claim 18 and an antibody which specifically binds to the protein of claim 18.

43. (new) A method of screening for candidate therapeutic agents, comprising the steps of:

contacting the protein of claim 18 with a test compound;

assaying for binding between the protein and the test compound; and

identifying a test compound that binds to the protein as a candidate therapeutic agent that may be useful for treating a disorder selected from the group consisting of a gastrointestinal disorder, a liver disorder, a metabolic disorder, a neurological disorder, a cardiovascular disorder, a hematological disorder, a reproductive disorder, and endocrine disorder, a hormonal disorder, a respiratory disorder, and a genitourinary disorder.

44. (new) The method of claim 43 wherein either the test compound or the protein comprises a detectable label.

45. (new) The method of claim 43 wherein either the test compound or the protein is bound to a solid support.

46. (new) A method of screening for candidate therapeutic agents, comprising the steps of:

assaying for expression of a polynucleotide encoding the protein of claim 18 in the presence and absence of a test compound; and

identifying a test compound that regulates the expression as a candidate therapeutic agent that may be useful for treating a disorder selected from the group consisting of a gastrointestinal disorder, a liver disorder, a metabolic disorder, a neurological disorder, a cardiovascular disorder, a hematological disorder, a reproductive disorder, and endocrine disorder, a hormonal disorder, a respiratory disorder, and a genitourinary disorder.

47. (new) The method of claim 46 wherein the step of contacting is in a cell.

48. (new) The method of claim 46 wherein the step of contacting is in a cell-free *in vitro* translation system.

49. (new) A pharmaceutical composition comprising

a therapeutic reagent selected from the group consisting of the preparation of claim 20, an antisense oligonucleotide which binds to an expression product of a gene which encodes the protein of claim 18, the protein of claim 18, and the polynucleotide of claim 25; and

a pharmaceutically acceptable carrier.

50. (new) The pharmaceutical composition of claim 49 wherein the polynucleotide comprises the nucleotide sequence shown in SEQ ID NO:1 or 3.